

IN THE CLAIMS

Please replace the claims as filed with the claims set forth below.

1. (Currently Amended) A bedding for a utility line comprising:  
an elongate trench formed in the earth;  
a filter fabric wrap lining a lengthwise segment of the trench having a select length;  
a first select depth of porous particulate material resting on a trench bottom underlying a ~~non-perforated utility line~~ configured to prevent intrusion of ground water and supporting the ~~non-perforated utility line~~ in the lengthwise segment; and  
a second select depth of porous particulate material overlying the ~~non-perforated utility line~~ in the lengthwise segment;  
the select length of the lengthwise segment, the first select depth and the second select depth being selected to store a select volume of water.
2. (Currently Amended) The bedding of claim 1 wherein a select portion of the porous particulate material supporting the ~~non-perforated utility line~~ lies within a water table underlying the ~~non-perforated utility line~~.
3. (Original) The bedding of claim 1 further comprising at least one drainage well in liquid communication between a water table underlying the trench and a bottom of the lengthwise segment of the trench.
4. (Original) The bedding of claim 1 further comprising a conduit providing liquid communication between a source of water and the lengthwise segment of the trench.
5. (Currently Amended) The bedding of claim 4 further comprising a perforated pipe ~~overlying the non-perforated utility line~~ in the lengthwise segment, the perforated pipe being in fluid communication with the conduit.
6. (Original) The bedding of claim 4 wherein the source of water is a bioretention facility comprising an engineered planting medium overlying a water collection

structure, the surface of the engineered planting medium supporting growing plants and the collection structure being in liquid communication with the conduit.

7. (Original) The bedding of claim 6 wherein the water collection structure comprises a perforated pipe within a porous particulate material bed, the perforated pipe being in liquid communication with the conduit.

8. (Original) The bedding of claim 7 wherein the porous particulate material bed is wrapped in a filter fabric.

9. (Original) The bedding of claim 1 wherein the porous particulate material is gravel.

10. Canceled.

11. (Currently Amended) A surface water retention and dissipation structure comprising:

a catch basin configured to collect surface water run-off;

an elongate trench formed in the earth;

a filter fabric wrap lining a lengthwise segment of the trench having a select length;

a first select depth of porous particulate material resting on a trench bottom underlying a

~~non-perforated utility line~~ configured to prevent intrusion of ground water in the lengthwise segment;

~~non-perforated utility line~~ in the lengthwise segment; and

a conduit in liquid communication between the catch basin and the lengthwise segment;

the select length of the lengthwise segment, the first select depth and the second select depth being selected to store a select volume of water.

12. (Currently Amended) The surface water retention and dissipation structure of claim 11 further comprising a perforated pipe ~~everlying the non-perforated utility line~~ in the lengthwise segment, the perforated pipe being in liquid communication with the conduit.

13. (Original) The surface water retention and dissipation structure of claim 11 wherein the first select depth is sufficient to communicate the bottom of the trench with a water table underlying the trench.

14. (Original) The surface water retention and dissipation structure of claim 11 further comprising at least one drainage well in liquid communication between a water table underlying the trench and the bottom of the trench.

15. (Original) The surface water retention and dissipation structure of claim 11 further comprising a bioretention facility comprising an engineered planting medium overlying a water collection structure, the surface of the engineered planting medium supporting growing plants and the collection structure being in liquid communication with the conduit.

16. (Original) The surface water retention and dissipation structure of claim 15 wherein the water collection structure comprises a perforated pipe within a porous particulate material bed, the perforated pipe being in liquid communication with the conduit.

17. (Original) The surface water retention and dissipation structure of claim 11 wherein the second select depth is zero inches.

18. (Currently Amended) A method of constructing a utility line bedding for water management comprising:

determining a select volume of water to be dissipated;

excavating a utility line trench of width sized to receive a ~~non-perforated~~ utility line configured to prevent intrusion of ground water of a given diameter therein and excavating a lengthwise segment of the trench to a select segment length and select segment depth;

lining the lengthwise segment with a filter fabric wrap;

providing a base of porous particulate material having a first select depth on a bottom of the trench in the lengthwise segment of the trench;

laying the ~~non-perforated~~-utility line on the base;

providing a cover of porous particulate material having a second select depth over the ~~non-perforated~~-utility line;

selecting the first select depth, the second select depth and the select length of the lengthwise segment of the trench to provide a sufficient volume of porous particulate material to hold the select volume of water to be dissipated.

19. (Original) The method of claim 18 wherein the water to be dissipated is storm water run-off and the select volume of storm water run-off to be dissipated is determined based upon a projected storm event.

20. (Currently Amended) The method of claim 18 further comprising providing liquid communication between the bottom of the lengthwise segment and a water table underlying the ~~non-perforated~~-utility line trench.

21. (Original) The method of claim 20 wherein the liquid communication is provided by excavating the lengthwise segment to a depth sufficient for the trench bottom to lie below the surface of the water table.

22. (Currently Amended) The method of claim 18 further comprising providing a perforated pipe in the ~~cover of~~ porous particulate material ~~over the non-perforated utility line in~~ of the lengthwise segment.

23. (Original) The method of claim 22 further comprising providing a source of the storm water run off to be dissipated in liquid communication with the perforated pipe.

24. (Original) The method of claim 18 further comprising providing a conduit in liquid communication between a source of the storm water run off to be dissipated and the lengthwise segment.

25. (Currently Amended) A method of designing a utility line trench for water management comprising:

- | sizing a ~~non-perforated~~-utility line configured to prevent the intrusion of ground water to be placed within a trench;
- | selecting a porous particulate material to place in the trench;
- | selecting a width for the trench wherein the width is no less than an outer diameter of the ~~non-perforated~~-utility line;
- | selecting a length of the trench that will contain the porous particulate material;
- | determining a volume of water to be stored within an area occupied by the porous particulate material;
- | using the width, the length, and the volume of water to determine a minimum depth for the porous particulate material; and
- | selecting a depth for the trench wherein the depth is greater than the minimum depth for the porous particulate material.

26. (Currently Amended) The method of claim 25 further comprising taking into account a volume occupied by the ~~non-perforated~~-utility line in the porous particulate material when determining the minimum depth for the porous particulate material.

27. (Original) The method of claim 25 wherein a storm water run-off is used to determine the volume of water.

28. (Original) The method of claim 25 wherein the porous particulate material selected is gravel.

29. (Currently Amended) A bedding for a utility line comprising:  
an elongate trench formed in the earth;  
a first depth of porous particulate material underlying a ~~non-perforated~~-utility line configured to prevent the intrusion of water and supporting the ~~non-perforated~~-utility line along a lengthwise segment of the trench having a select length;

a second depth of porous particulate material overlying the ~~non-perforated~~-utility line along the lengthwise segment;

the select length of the lengthwise segment, the first select depth, the second select depth and a width of the lengthwise segment being selected to store a select volume of water; and

a drainage pipe within the porous particulate material in the lengthwise segment, the drainage pipe being in liquid communication with a source of water.